

WHAT IS CLAIMED IS:

1. An information processing apparatus comprising:  
holding means for holding print data for which a  
print request is made;

5       generating means for generating reference  
information for performing pull print corresponding to  
the print data held in said holding means; and  
issuing means for issuing said reference  
information for performing pull print corresponding to  
10   said print data generated in said generating means to a  
printing apparatus, which is made communicatable via a  
predetermined communication medium, as a print request.

2. The information processing apparatus according  
15   to claim 1,

wherein said issuing means is Web server function  
processing means in compliance with a predetermined  
protocol and the Web server function processing means  
issues a print request in compliance with said  
20   predetermined protocol to a printing apparatus and  
transfers said print data held in said holding means to  
said printing apparatus if a request for obtaining  
predetermined print data has been returned from said  
printing apparatus.

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3. The information processing apparatus  
according to claim 1, wherein said print data is

transmitted via said predetermined communication medium,  
the apparatus further comprising receiving means  
for receiving print data that is transmitted via a  
predetermined communication medium,

5        wherein said holding means holds print data  
received by said receiving means and said generating  
means generates reference information for performing  
pull print corresponding to the print data held in said  
holding means.

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4. The information processing apparatus according  
to claim 1, further comprising notifying means for  
notifying a second information processing apparatus,  
which is made communicatable via a predetermined  
15 communication medium, of said reference information for  
performing pull print generated in said generating  
means,

wherein said reference information is for said  
second information processing apparatus to instruct  
20 said printing apparatus to perform pull print via the  
predetermined communication medium.

5. The information processing apparatus according  
to claim 1, further comprising:

25        recognizing means for recognizing whether or not  
said printing apparatus that is made communicatable via  
the predetermined communication medium corresponds to

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wherein said predetermined protocol is an Internet

printing protocol.

9. The information processing apparatus according to claim 2,

5            wherein a print request in compliance with said predetermined protocol is a Pull request for obtaining said print data and the Pull request includes at least a GET method of an HTTP protocol or a get subcommand of an FTP protocol.

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10. The information processing apparatus according to claim 1,

wherein said reference information for performing  
pull print is information for specifying a storing  
15 place of print data stored in a storage unit and  
includes at least a URL.

11. The information processing apparatus according to claim 1, further comprising deleting means for deleting said print data held in said holding means according to a response from the print apparatus to which the print data is transferred.

12. The information processing apparatus according  
25 to claim 11,

wherein said deleting means recognizes information  
for instructing whether or not said print data held in

said holding means is to be deleted and controls to switch whether or not said print data is to be deleted according to the recognition.

5        13. The information processing apparatus according to claim 2,

         wherein said Web server function processing means manages said print data held in said holding means and starts server function processing for performing Web  
10       server function processing in compliance with a predetermined protocol when a print request is issued from an application to a printing system.

         14. The information processing apparatus according  
15       to claim 13,

         wherein said printing system includes a printer driver and a print spooler.

         15. A pull print printing system comprising:  
20       a printing apparatus having a pull print function; generating means for generating reference information for performing pull print corresponding to print data for which a print request is made by said printing apparatus; and

25       instructing means for instructing a printing apparatus, which is made communicatable via a predetermined communication medium, to print said

reference information for performing said pull print generated in said generating means.

16. An information processing method comprising:

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5      a step of holding print data for which a print
      request is made;
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a step of generating reference information for performing pull print corresponding to the print data held in said holding step; and

10           a step of issuing said reference information for  
performing said pull print corresponding to said print  
data generated in said generating step to a printing  
apparatus, which is made communicatable via a  
predetermined communication medium, as a print request.

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17. The information processing method according to claim 16,

wherein said issuing step is a Web server function processing step in compliance with a predetermined protocol and the Web server function processing step issues a print request in compliance with said predetermined protocol to a printing apparatus and transfers said print data held in said holding step to said printing apparatus if a request for obtaining predetermined print data has been returned from said printing apparatus.

18. The information processing method according to claim 16, wherein said print data is transmitted via said predetermined communication medium,

the method further comprising a step of receiving  
5 print data that is transmitted via a predetermined communication medium,

wherein said holding step holds print data received in said receiving step and said generating step generates reference information for performing  
10 pull print corresponding to the print data held in said holding step.

19. The information processing method according to claim 16, further comprising a step of notifying a  
15 second information processing apparatus, which is made communicatable via a predetermined communication medium, of said reference information for performing pull print generated in said generating step,

wherein said reference information is for said  
20 second information processing apparatus to instruct said printing apparatus to perform pull print via said predetermined communication medium.

20. The information processing method according to  
25 claim 16, further comprising:

a step of recognizing whether or not said printing apparatus that is made communicatable via the

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predetermined communication medium corresponds to pull print; and

a step of determining whether a print request for push print or a print request for pull print is issued  
5 to said printing apparatus according to recognition of said recognizing step.

21. The information processing method according to claim 16,

10 wherein said issuing step issues said reference information for performing pull print corresponding to said print data generated in said generating step to a plurality of printing apparatuses as a print request.

15 22. The information processing method according to claim 21, further comprising a transmission controlling step of transmitting print data to a printing apparatus, which is requested to obtain print data first, in response to print requests issued to a plurality of  
20 printing apparatuses in said issuing step,

wherein said communication controlling step controls not to transmit said print data to the printing apparatuses other than the printing apparatus that is requested to obtain print data first.

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23. The information processing method according to claim 17,



wherein said predetermined protocol is an Internet printing protocol.

24. The information processing method according to  
5 claim 17,

wherein a print request in compliance with said predetermined protocol is a Pull request for obtaining said print data and the Pull request includes at least a GET method of an HTTP protocol or a get subcommand of  
10 an FTP protocol.

25. The information processing method according to claim 16,

wherein said reference information for performing  
15 pull print is information for specifying a storing place of print data stored in a storage unit and includes at least a URL.

26. The information processing method according to  
20 claim 16, further comprising a step of deleting said print data held in said holding step according to a response from said print apparatus to which said print data is transferred.

27. The information processing method according to  
25 claim 26,

wherein said deleting step recognizes information

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for instructing whether or not said print data held in said holding step is to be deleted and controls to switch whether or not said print data is to be deleted according to the recognition.

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28. The information processing method according to claim 17,

wherein said Web server function processing step manages said print data held in said holding step and starts server function processing for performing Web server function processing in compliance with a predetermined protocol when a print request is issued from an application to a printing system.

15           29. The information processing method according to  
claim 28,

wherein said printing system includes a printer driver and a print spooler.

20           30. A processing method of a pull print printing  
system comprising:

a step of generating reference information for performing pull print corresponding to print data for which a print request is made by a printing apparatus;

25           a step of issuing said reference information for  
performing pull print corresponding to said print data  
generated in said generating step to a printing

apparatus, which is made communicatable via a predetermined communication medium, as a print request; and

a print controlling step for performing pull print  
5 control processing according to a print request issued  
in said issuing step.

31. A computer readable storage medium storing a program for executing:

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10      a step of holding print data for which a print
      request is made;
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a step of generating reference information for performing pull print corresponding to the print data held in said holding step; and

15           a step of issuing said reference information for  
performing pull print corresponding to said print data  
generated in said generating step to a printing  
apparatus, which is made communicatable via a  
predetermined communication medium, as a print request.

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32. A computer readable storage medium storing a program for executing:

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    a step of holding print data for which a print
request is made;

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25           a step of generating reference information for  
performing pull print corresponding to the print data  
held in said holding step;

a step of issuing said reference information for performing said pull print corresponding to said print data generated in said generating step to a printing apparatus, which is made communicatable via a  
5 predetermined communication medium, as a print request;  
and

a print controlling step for performing pull print control processing according to a print request issued in said issuing step.  
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33. A program to be executed by an information processing apparatus, comprising:

a step of holding print data for which a print request is made;  
15 a step of generating reference information for performing pull print corresponding to the print data held in said holding step; and  
a step of issuing said reference information for performing said pull print corresponding to said print  
20 data generated in said generating step to a printing apparatus, which is made communicatable via a predetermined communication medium, as a print request.

34. A program to be executed by an information  
25 processing apparatus, comprising:

a step of holding print data for which a print request is made;

a step of generating reference information for performing pull print corresponding to the print data held in said holding step;

5 a step of issuing said reference information for performing said pull print corresponding to said print data generated in said generating step to a printing apparatus, which is made communicatable via a predetermined communication medium, as a print request; and

10 a print controlling step for performing pull print control processing according to a print request issued in said issuing step.

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